

NO
114-1007

APPLICATION SPECIFICATION

1. SCOPE

This specification covers the requirements for application of .140 diameter MATE-N-LOK* pin and socket contacts. These requirements are applicable to hand or automatic machine crimping tools. For specific wire and insulation ranges relative to the products covered in this specification see Figure 2 and 3.

2. NOMENCLATURE

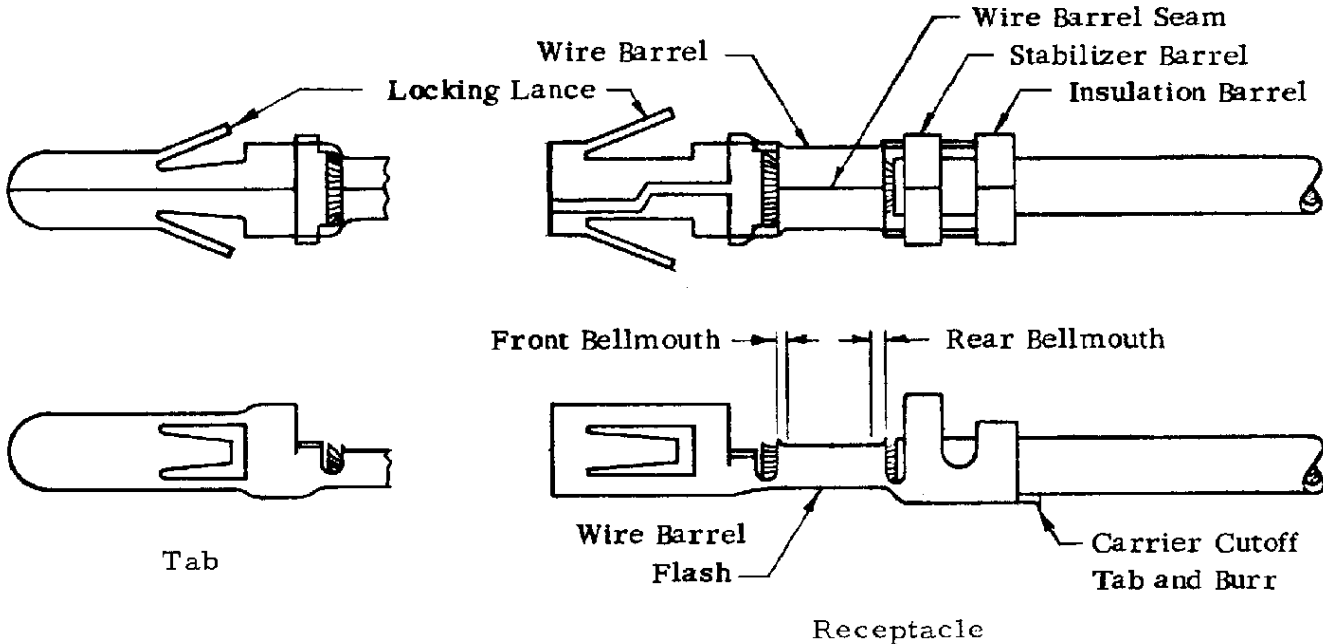


Figure 1

3. CRIMP AND DIMENSIONAL REQUIREMENTS

3.1. Wire Preparation

A. Strip Length


Insulation shall be stripped as indicated in Figure 2 and 3.

B. Workmanship

Reasonable care shall be taken not to nick, scrape or cut any strands or the solid wire during the stripping operation.

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| | | | | DR <i>C. C. Fatz</i> 10/27/76 |  AMP INCORPORATED Harrisburg, Pa. | NO 114-1007 | REV A |
| | | | | CHK <i>S. Briner</i> 10/27/76 | | | |
| | | | | APP <i>D. Menny</i> 10/29/76 | LOC B | A | |
| A REVISED PER ECN-24-260631 WLS/JP 12APR24 | | | | NAME CONTACT, PIN AND SOCKET, MATE-N-LOK, .140 DIAMETER, APPLICATION OF | | | |
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| LTR | REVISION RECORD | | APP | DATE | | | |

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3.2. Carrier Cutoff Tab and Burr

A. Cutoff Tab

Cutoff tab shall not exceed .015.

B. Burr

Burr on cutoff shall not exceed .005.

3.3. Wire Barrel Crimp

A. Crimp Dimensions and Type

Crimp height, width and type shall be as shown in Figure 2 and 3.

B. Wire Barrel Flash

Wire barrel flash shall not exceed .007.

C. Wire Barrel Seam

The wire barrel seam shall be closed adequately to confine all strands of the wire. There shall be no loose wire strands or wire strands embedded in the outside of the wire barrel.

D. Bellmouth

- (1) Rear bellmouth length shall be .010-.030.
- (2) Front bellmouth length shall be .015 maximum.


E. Conductor Location

- (1) End of the wire shall be flush with the front end of the wire barrel or extend .094 maximum after crimping.
- (2) Both insulation and conductor shall be visible between the stabilizer barrel and wire barrel when the insulation diameter is less than .150. Care shall be taken not to allow insulation to be crimped in the wire barrel. Both conductor and insulation shall be visible between the stabilizer barrel and insulation barrel when the insulation diameter is .150 or greater.

3.4. Insulation Barrel Crimp

A. Crimp Dimensions and Type

- (1) Crimp width and type shall be as shown in Figure 2 and 3.
- (2) Crimped insulation barrel shall not extend at any point more than .005 outside the .190 diameter of the stabilizer. Check using AMP Gage 578957 and 679648.

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B. Workmanship

Reasonable care shall be taken not to cut or break the insulation during the crimping operation.

3.5. Locking Lance

Locking lance shall not be deformed.


3.6. Stabilizer Barrel Crimp

A. Crimp Dimensions and Type

- (1) Crimp diameter and type shall be as shown in Figure 2 and 3.
- (2) Crimped stabilizer barrel shall be concentric with the .162-.166 outside diameter dimension on socket within .015 diameter. Check using AMP Gage 578957 and 679648.
- (3) Crimped stabilizer barrel shall be concentric with the .138-.142 outside front diameter dimension on pin within .015 diameter. Check using AMP Gage 578957 and 679648.

B. Twist or Roll

There shall be no twist or roll in crimped portion that will impair usage of the contact.

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| Part Numbers Pin | Socket | Wires | | Insulation Diameter | Strip Length | Wire Barrel Crimp | | Insulation Barrel Crimp | | Stabilizer Barrel Crimp | | |
|---------------------|--------|-------|------|------------------------|-----------------|-------------------|-----------------|-------------------------|-------|-------------------------|--------------------|-----------------------|
| | | No | Size | | | Width | Height ±.002 | Type Crimper/Anvil | Width | Type Crimper/Anvil | Diameter, ±.005 | Type Crimper/Anvil |
| 61627 | 61626 | 1 | 14 | .149 or less | .250 ±.062 | .100 | F | .180 | F | O | .190 | O |
| | | | 16 | | | | | | | | | |
| | | | 18 | | | | | | | | | |
| | | | 20 | | | | | | | | | |
| 350201 | 350200 | 1 | 14 | .150-.180 | .312 ±.031 | .100 | F | .180 | F | O | .190 | O |
| | | | 16 | | | | | | | | | |
| | | | 18 | | | | | | | | | |
| | | | 20 | | | | | | | | | |
| 350201 | 350200 | 1 | 10 | .149 or less | .250 ±.062 | .140 | F | .180 | F | O | .190 | O |
| | | | 12 | | | | | | | | | |
| | | | 14 | | | | | | | | | |
| | | | 10 | | | | | | | | | |
| 350201 | 350200 | 1 | 12 | .150-.180 | .312 ±.031 | .140 | F | .180 | F | O | .190 | O |
| | | | 14 | | | | | | | | | |
| | | | 10 | | | | | | | | | |
| | | | 12 | | | | | | | | | |

Figure 2
Automatic Machine Wire Crimp Dimensions

| Part Numbers Pin | Socket | Wires | | Insulation Diameter | Strip Length | Wire Barrel Crimp | | Insulation Barrel Crimp | | Stabilizer Barrel Crimp | | Head Tool Part No | |
|---------------------|--------|-------|------|------------------------|-----------------|-------------------|--------|-------------------------|-------|-------------------------|----------------|----------------------|--|
| | | No | Size | | | Width | Height | Type Crimper/Anvil | Width | Type Crimper/Anvil | Height, max | | Type Crimper/Anvil |
| 350389 | 350388 | 1 | 14 | .149 or less | .250 ±.062 | .090 | F | .160 | F | O | .190 | O | 90247-1 |
| | | | 16 | | | | | | | | | | |
| | | | 18 | | | | | | | | | | |
| | | | 20 | | | | | | | | | | |
| 350391 | 350390 | 1 | 14 | .150-.180 | .312 ±.031 | .090 | F | .160 | F | O | .190 | O | 69710 with die insert 90306-1 |
| | | | 16 | | | | | | | | | | |
| | | | 18 | | | | | | | | | | |
| | | | 20 | | | | | | | | | | |
| 350391 | 350390 | 1 | 10 | .149 or less | .250 ±.062 | .140 | F | .160 | F | O | .190 | O | 69710 with die insert 90306-1 |
| | | | 12 | | | | | | | | | | |
| | | | 14 | | | | | | | | | | |
| | | | 10 | | | | | | | | | | |
| 350391 | 350390 | 1 | 12 | .150-.180 | .312 ±.031 | .140 | F | .160 | F | O | .190 | O | 69710 with die insert 90306-1 |
| | | | 14 | | | | | | | | | | |
| | | | 10 | | | | | | | | | | |
| | | | 12 | | | | | | | | | | |

Figure 3
Hand Tool Wire Crimp Dimensions



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